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(54) SYSTEM FOR MULTITASKING MANAGEMENT EMPLOYING CONTEXT CONTROLLER HAVING EVENT VECTOR SELECTION BY PRIORITY ENCODING OF CONTEXT EVENTS

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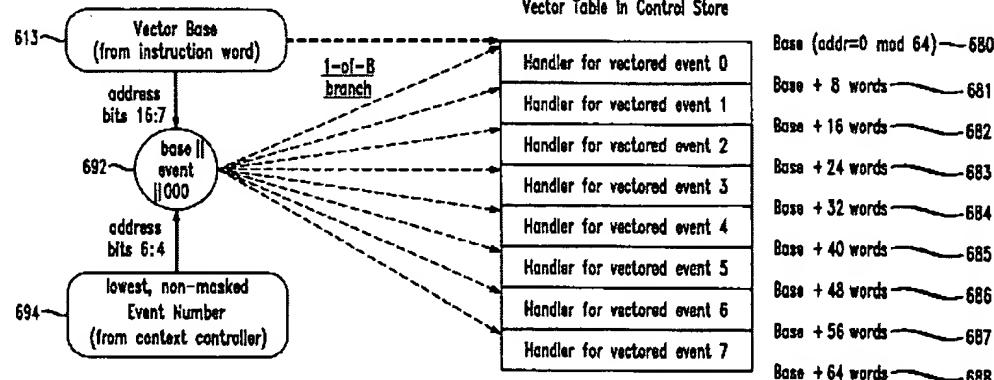
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ABSTRACT

A context controller for managing multitasking in a processor and a method of operating the same. In one embodiment, the context controller includes: (1) an event recorder that records occurrences of events and (2) an encoder, associated with the event recorder, that, in response to a software instruction, priority encodes bits corresponding to at least some of the events to generate therefrom an event-dependent vector to allow the processor to branch as a function thereof. Vectoring is per-instance of the vector decode software instruction, not per-event or per-context.

22 Claims, 21 Drawing Sheets



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